

Work Order ID 147717

Wednesday, June 08, 2016 2:38:38 PM

147717

Page 1

Item ID: D3910-5 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Crosstube Lug
Start Date: 6/30/2016 Start Qty: 20.00 ***20*** Cust Item ID:
Required Date: 7/5/2016 Req'd Qty: 20.00 ***20*** Customer:

Reference:

DAS
13
9-89

Approvals: Process Plan: Date: JUN 09 2016 Tooling: Date: Run Start ***NR1***
QC: Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3910	E								
110	Outsource process - Machining	0.00							DAS 13 9-89
110	HAAS CNC VERTICAL MACHINING #1								
Outsource5	Memo	0.00							
Outsource process - Machining	Issue P/O to ATG: <u>32679</u>								
	MANUFACTURE AS PER DWG								
	C of C is required								
120	Receive & Inspect for Damage & Mat'l Certs	0.00							
120									
Packaging	Memo	0.07							
Packaging	Ensure C of C is attach								
130	QC6- Inspect dimensions to drawing	0.00							DAS 38 9-89
130									
QC	Memo	0.00							
Quality Control									

(20)

SEP 27 2016

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
				Completed By					
				Lead hand / Supervisor Approval Verification					
				QC / QA Coordinator Approval					
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180	Identify as per dwg & Stock Location: 8524	0.00							
180									
Packaging	Memo	0.03				20		SEP 2 8 2016	DAS 6 9-89
Packaging									
190	QC21- Final Inspection - Work Order Release	0.00							
190									
QC	Memo	0.33				DAS 21 9-89		SEP 3 0 2016	
Quality Control									

DAS 21 9-89**SEP 2 8 2016**

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Picklist Print

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Page 1

Work Order ID: 147717

147717

Parent Item: D3910-5

D3910-5

Parent Item Name: Crosstube Lug

Start Date: 6/30/2016

Required Date: 7/5/2016

Start Qty: 20.00

Required Qty: 20.00

Comments: IPP REV:A 13.02.28 NEW ISSUE DD VERF:JFS
13.09.26 AS PER REV.D DD VERF:JLM

IPP REV:B

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2423		Manufactured	No				f	232.5740		2.526316			
D2423									**			JUN 14 2016	DAS 13 9:59
Lug Extrusion													
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				Metec		232.5739767							
				127892		38.9964647							
				131451		193.577512							
D3910-5P		Purchased	No				Each	0.0000					
D3910-5P									**				
Crosstube Lug													

B148835

20
20x 16-9-13

DQA: _____ Date: _____



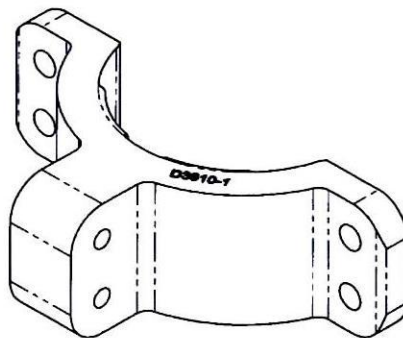
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

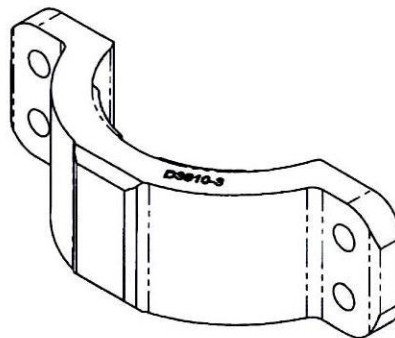
Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
				Completed By 					
				Lead hand / Supervisor Approval Verification 					
				QC / QA Coordinator Approval 					

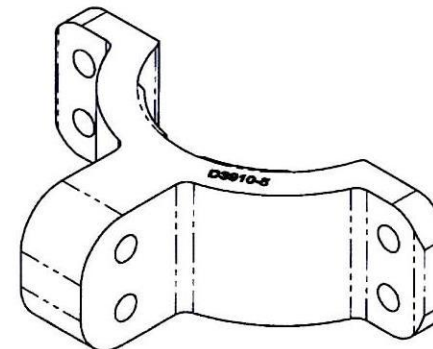
Root Cause				FAULT CATEGORY			
Environment ☐	☐	No Re-verification ☐		☐	Pressure/Forced	☐	Temperature/Cure
Design ☐	☐	Operator ☐		☐	Bending	☐	Set-up
Doc/Data ☐	☐	Offset/Setup ☐		☐	Centre Not Concentric	☐	BOM/Route
Equip/Tooling ☐	☐	Supplier ☐		☐	Cracks	☐	Broken/Damage/Defect
Handling/Pre ☐	☐	Training ☐		☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified
Material ☐	☐	Use for Testing ☐		☐	Cuffs	☐	Contamination
Internal Transport ☐	☐	Poor Information ☐		☐	Crushing	☐	Countersink
Tribal Knowledge ☐	☐	Rushing ☐		☐	Heat Treat	☐	Cut Too Short
LOA ☐	☐	Product Improvement ☐		☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear
Substation ☐	☐	Process Improvement ☐		☐	Marks/Chatter	☐	Drill Holes
Past Expiry Date ☐	☐	Manufacturing Process ☐		OTHER :			
Misidentified ☐	☐	Past Due ☐					



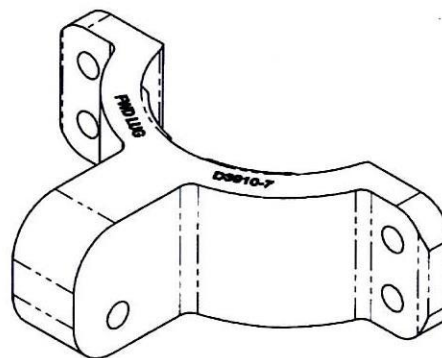
D3910-1 X-TUBE LUG



D3910-3 X-TUBE LUG



D3910-5 X-TUBE LUG



D3910-7 X-TUBE LUG

DAS
13
9-89

JUN 05 2015

W10.147717

RELEASED

2014 JUN 05

ECN 14-572

NOTES:

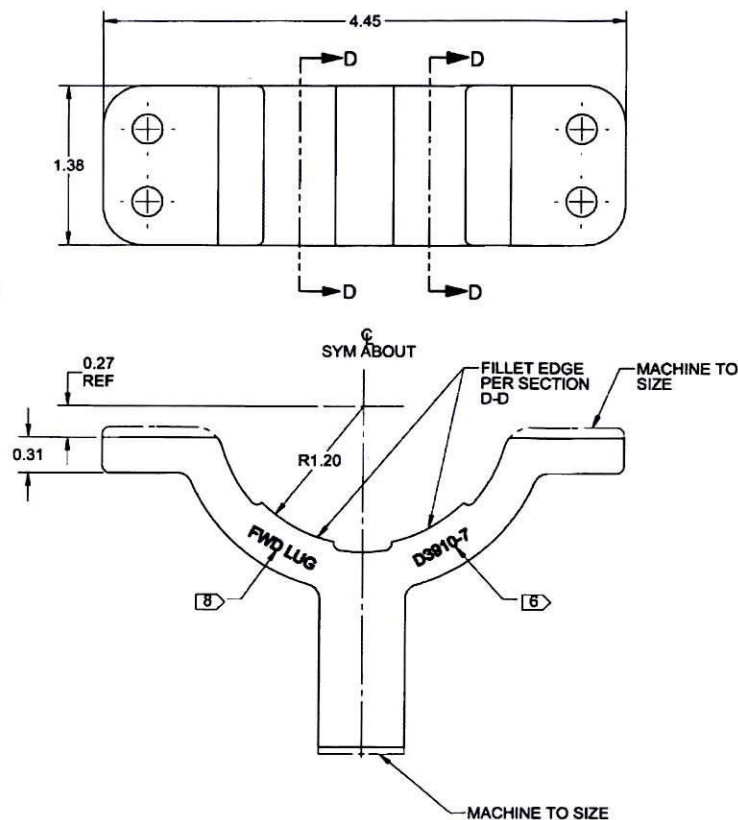
- 1) MATERIAL: MAKE FROM D2423 EXTRUSION
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: ENGRAVE PART NUMBER TO A DEPTH OF 0.010 ± 0.005 IN THIS LOCATION WITH A TOOL TIP RADIUS OF 0.015 ± 0.005
- 7) WEIGHT -1: 0.32 lbs
-3: 0.25 lbs
-5: 0.36 lbs
-7: 0.37 lbs
- 8) IDENTIFICATION: ENGRAVE "FWD LUG" TO A DEPTH OF 0.010 ± 0.005 IN THIS LOCATION WITH A TOOL TIP RADIUS OF 0.015 ± 0.005

E	ADD -7 PER NCR14-3871	AJS	14.05.16
D	CHANGED FASTENER HOLES IN -5 FOR 1/4" HARDWARE. REASON: EASE OF INSTALLATION.	AJS	13.08.14
C	ADD -5.	AJS	13.08.08
B	Ø0.257 HOLES: 4 PL WAS 2 PL (A3-2) & (A3-3); R0.34 FILLET WAS R0.50 (A3-2) & (A3-3). REASON: SEE TR-D350-607-2	JPH	10.03.16
A	NEW ISSUE	JPH	10.03.04
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	JPH	DRAWING NO.	REV. E
MFG. APPR.	JPH	D3910	SHEET 1 OF 5
APPROVED	JPH	TITLE	SCALE
DE APPR.	JPH	X-TUBE LUG (350)	NTS
DATE	14.05.16	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS COVENANT THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMPLETED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

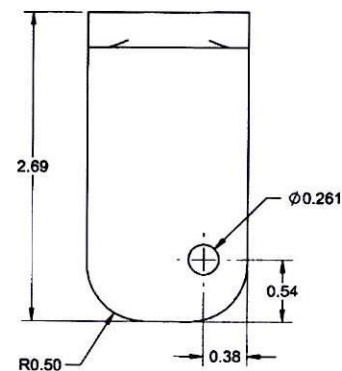
SECTION D-D



ROUND EDGE
R0.06 MIN - 0.10 MAX
2 PL



D3910-7 X-TUBE LUG



RELEASED

2014 JUN 05 *qp*

DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	<i>[Signature]</i>	DRAWING NO. D3910	REV. E
MFG. APPR.	<i>[Signature]</i>	SHEET 5 OF 5	
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	X-TUBE LUG (350)	NTS
DATE	14.05.16	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



20 Terry Fox Drive
Vankleek Hill, Ontario K0B 1R0 , Canada
Tel: (613) 678-3957
Fax: (613) 678-3956

Delivery Slip No.: 21379
Date: Sep 12, 2016
Page: 1

Sold to: Dart Aerospace Ltd. Att. Linda Lacelle 1270 Aberdeen Street Hawkesbury, Ontario K6A 1K7	Ship to: Dart Aerospace Ltd. Att. Linda Lacelle 1270 Aberdeen Street Hawkesbury, Ontario K6A 1K7
Order No.: 32679	Sold By: VanDenYssel, David
Shipped By: your truck	Ship Date: Sep 12, 2016

Description	Unit	Ordered quantity	Shipped quantity	Backorder quantity
D3910-1 Crosstube Lug, as per drawing D3910 Rev.E	Each	30		
D3910-5 Crosstube Lug, as per drawing D3910 Rev.E	Each	20	20	
D3910-7 Crosstube Lug, as per drawing D3910 Rev.E	Each	20		
D4091-1 Lug as per drawing D4091 Rev.A	Each	10		
D3394-1 Lug Assembly as per drawing D3394-1 Rev.B	Each	40		
Above lugs Alodine and Paint as per QSI 005 *** Please bring back the green containers when picking up***				
The delivered goods must be inspected upon receipt to confirm compliance. Should there be discrepancies please notify METEC within 30 days of delivery. The goods are otherwise deemed accepted.				

Received by

Sp 16-9-B.

Thank you for your order!



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO32679**

Purchase Order Date 6/13/2016

PO Print Date 6/13/2016

Page Number 1 of 3

Order From :

METEC METAL TECHNOLOGY INC.
20 TERRY FOX DRIVE PO BOX 781
VANKLEEK HILL, ON K0B 1R0
CA

VC-MET003

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

E-MAILED

JUN 14 2016

Contact Name

Vendor Phone 613 678 3957

Ship To Contact

Ship To Phone

Ship Via: Dart Truck

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax

10127-2607

Terms

Net 10

Currency

CAD

FOB

Destination-Collect

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extend Pri
1	D3910-1P AS PER DWG D3910 REV. E B147359	Crosstube Lug	6/30/2016 Yes 6/30/2016		30.00 Each	\$16.10	\$483.0
Line Total:							\$483.0
2	D3910-5P AS PER DWG D3910 REV. E B147717	Crosstube Lug	6/30/2016 Yes 6/30/2016		20.00 Each	\$16.10	\$322.0
Line Total:							\$322.0
3	D3910-7P AS PER DWG D3910 REV. E B147314	Crosstube Lug	6/30/2016 Yes 6/30/2016	FN	20.00 Each	\$16.10	\$322.0

Note:

6/13/2016

SP 16-6-17



20 Terry Fox Drive, Vankleek Hill, Ontario K0B 1R0

Tel. (613) 678-3957 & (613) 678-2782 Fax (613) 678-3956 metec@metec.ca

CERTIFICATE OF CONFORMITY

SOLD TO:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, Ont.
K6A 1K7

SHIPPED TO:

same

<u>QUANTITY</u>	<u>PART NUMBER</u>	<u>PART NAME</u>	<u>P.O. NUMBER</u>
20	D3910-5	Lug Paint 20453	32679

MATERIAL: supplied by DART B14835

We hereby certify that the above parts were made in conformance with applicable drawings.

METEC Metal Technology Inc.

A handwritten signature in blue ink, appearing to read "Jan Norris", is written over a horizontal line.

Jan Norris

Vankleek Hill, September 12, 2016